Local Hazard Mitigation Plan Annex
City of Milpitas, CA

Introduction

The City of Milpitas is fifth largest city in Santa Clara County, California. The City has a population of 62,698 people, based on the 2000 census[1]. Last year, the City's budget was $60M. The City employs 550 people and is a full service City.

The Planning Process

The process of preparing this plan was familiar to the City of Milpitas. The City has a Safety Element to its General Plan last updated in 1994 that includes a discussion of fire, earthquake, flooding, and landslide hazards. In addition, the City routinely enforces the requirements of the California Environmental Quality Act (CEQA) requirements (which, since 1988, have required mitigation for identified natural hazards). The City's effort has focused on building on these pre-existing programs and identifying gaps that may lead to disaster vulnerabilities in order to work on ways to address these risks through mitigation.

Many of the activities conducted by the City were fed into the planning process for the multi-jurisdictional plan. The City participated in various ABAG workshops and meetings, including the general "kick-off" meeting. In addition, the City has provided written and oral comments on the multi-jurisdictional plan. Finally, the City provided information on facilities that are viewed as "critical" to ABAG.

Key City staff met to identify and prioritize mitigation strategies appropriate for the City. Staff involved in this meetings included representatives of the Building, Planning, Engineering, Finance and Fire departments. Prior to the first meeting, appropriate City departments were identified. At the meeting each mitigation strategy was reviewed in the light of general priorities and existing programs. After the meeting, designated department representatives identified preliminary budgets and potential funding sources for strategies of specific interest. The City provided the opportunity for the public to comment on the draft mitigation strategies selected by City staff at the City Council meeting on April 5, 2005. A resolution adopting the plan and strategies was unanimously approved by the City Council at that same meeting. The mitigation strategies will become an implementation appendix to the General Plan's Safety Element

Hazard and Risk Assessment

The ABAG multi-jurisdictional Local Hazard Mitigation Plan, to which this is an Annex, lists nine hazards that impact the Bay Area, five related to earthquakes (faulting, shaking, earthquake-induced landslides, liquefaction and tsunamis) and four related to weather (flooding, landslides, wildfires and drought). Except for tsunamis, these hazards also impact the City. According to available hazard maps, tsunamis are not expected to affect the City.

[1] For complete Census information on this city, see **http://www.bayareacensus.ca.gov/**.

In addition to a number of general hazard mapping activities undertaken by the City since the last revision of the Safety Element, City staff made use of the detailed and current maps available on the ABAG website at **http://quake.abag.ca.gov/mitigation/**.

Information on disasters declared in Santa Clara County is at **http://quake.abag.ca.gov/mitigation/disaster-history.html.**

The City examined the hazard exposure of City urban land based on the information on ABAG's website at **http://quake.abag.ca.gov/mitigation/pickdbh2.html**. Of the 7422 urban acres in the City,

- 323 acres are in an Alquist-Priolo Fault Rupture Study Zone (due to the active Hayward fault that runs through the eastern portion of the City);
- All 7,422 urban acres are in the highest two categories of shaking potential;
- 516 acres are in an area where further studies are required of new development by the Seismic Hazard Mapping Program of the California Geological Survey due to earthquake-induced landslides;
- 5,166 acres are in an area where further studies are required of new development by the Seismic Hazard Mapping Program of the California Geological Survey due to liquefaction susceptibility;
- 5,819 acres are in areas of moderate, high, or very high liquefaction susceptibility mapped by the U.S. Geological Survey;
- 2,430 acres are in the 100-year flood plain, while an additional 2,626 acres are in other flood-prone areas;
- 773 acres are subject to dam inundation;
- 262 acres are in areas of existing landslides;
- 471 acres are subject to high, very high, or extreme wildfire threat, and 2,693 acres are in wildland-urban interface threat areas; and
- All 7,422 urban acres are subject to drought.

The City also examined the hazard exposure of infrastructure based on the information on ABAG's website at **http://quake.abag.ca.gov/mitigation/pickdbh2.html**. Of the 214 miles of roadway in the City,

- 9 miles of road are in an Alquist-Priolo Fault Rupture Study Zone (due to the active Hayward fault that runs through the eastern portion of the City);
- All 214 miles of road are in the highest two categories of shaking potential;
- 8 miles of road are in an area where further studies are required of new development by the Seismic Hazard Mapping Program of the California Geological Survey due to earthquake-induced landslides;
- 153 miles of road are in an area where further studies are required of new development by the Seismic Hazard Mapping Program of the California Geological Survey due to liquefaction susceptibility;
- 175 miles of road are in areas of moderate, high, or very high liquefaction susceptibility mapped by the U.S. Geological Survey;
- 72 miles of road are in the 100-year flood plain, while an additional 82 miles of road are in other flood-prone areas;
- 21 miles of road are subject to dam inundation;

- 5 miles of road are in areas of existing landslides;
- 8 miles of road are subject to high, very high, or extreme wildfire threat, and 78 miles of road are in wildland-urban interface threat areas.
- Drought is not a concern for transportation.

Finally, the City examined the hazard exposure of city-owned critical facilities based on the information on ABAG's website at **http://quake.abag.ca.gov/mitigation/pickcrit.html**. Of the 46 critical facilities owned by the City,

- 1 city-owned critical facility is in an Alquist-Priolo Fault Rupture Study Zone (due to the active Hayward fault that runs through the eastern portion of the City);
- All 46 city-owned critical facilities are in the highest two categories of shaking potential;
- 2 city-owned critical facilities are in an area where further studies are required of new development by the Seismic Hazard Mapping Program of the California Geological Survey due to earthquake-induced landslides;
- 43 city-owned critical facilities are in an area where further studies are required of new development by the Seismic Hazard Mapping Program of the California Geological Survey due to liquefaction susceptibility;
- 38 city-owned critical facilities are in areas of moderate, high, or very high liquefaction susceptibility mapped by the U.S. Geological Survey;
- 13 city-owned critical facilities are in the 100-year flood plain, while an additional 20 city-owned critical facilities are in other flood-prone areas;
- 11 city-owned critical facilities are subject to dam inundation;
- 1 city-owned critical facility is in areas of existing landslides; and
- 2 city-owned critical facilities are subject to high, very high, or extreme wildfire threat, and 13 city-owned critical facilities are in wildland-urban interface threat areas.
- Since the City operates a water utility, drought is a major concern.

In spite of the areas of the City located in flood-prone areas, there are no repetitive loss properties in the City based on the information at **http://quake.abag.ca.gov/mitigation/pickflood.html**.

Drought, though a potential problem in the City, is not fully assessed. What would be a drought in other areas of the country is controlled in this region through the importation of water and the storage of water in reservoirs. Occasionally, the impacts of prolonged periods of drought cause problems such as water rationing or shortages of water for landscaping. Shortages in precipitation in the Sierra Nevada can have a more pronounced impact on water supply in the region than a drought in the Bay Area itself. Thus, drought is not a hazard that can be depicted in map form. There is also no current data on the probability of drought that would be comparable to the USGS effort on earthquakes in the region, or the way 100-year flood maps are created.

The City plans to work with ABAG in developing the specific impact of each hazard to buildings, infrastructure and critical facilities as proposed in ABAG's Annex which states that ABAG will be developing this information in 2005 and early 2006. As these impacts are not fully developed, the City has reviewed and ranked the identified hazards based on past disasters and expected future events. The conclusion is that earthquakes (particularly shaking and

liquefaction), flooding and fires in the wildland-urban interface areas are more of a threat than other hazards. The City's concern regarding earthquakes is reflected in its first two Pre-Disaster Mitigation Grant submittals for the Large Gym Seismic Retrofit and the South Milpitas Waterline Replacement.

Mitigation Activities and Priorities

As a participant in the ABAG multi-jurisdictional planning process, City of Milpitas staff helped in the development and review of the comprehensive list of mitigation strategies in the overall multi-jurisdictional plan. The list was reviewed in detail at a meeting of the representatives of the Building, Planning, Engineering, Finance and Fire departments on February 16, 2005. At the meeting, all of the mitigation strategies were reviewed. The tentative decision on priority was made based on a variety of criteria, not simply on an economic cost-benefit analysis. These criteria include being technically and administratively feasible, politically acceptable, socially appropriate, legal, economically sound, and not harmful to the environment or our heritage.

Over time, we are committed to developing better hazard and risk information to use in making those trade-offs. We are not trying to create a disaster-proof region, but a disaster-resistant one. In addition, many of the strategies are existing City programs which are already a part of the planning process through plan and project review, building and fire code enforcement, and development of the City's General Plan. New activities, either identified as part of this Annex or those not yet considered, will be incorporated into these existing mechanisms. Some activities will require funds which are not yet identified. However, as such activities are adopted, the City will work to identify potential funding sources including capital improvement budgets, bond issues, and federal and state grants.

These draft priorities were submitted to the City Manager for review. The draft priorities were then provided to the City Council for adoption on April 5, 2005. The public was provided with an opportunity to comment on the draft priorities. The final strategies (as shown in the attached Table) will become an Implementation Appendix to the City's Safety Element.

In addition, the City examined the hazard exposure information to City-owned critical facilities supplied by ABAG. As mentioned in the Hazard and Risk Assessment section of this Annex, the City has determined that the combination of construction type, age, and shaking exposure of one facility is significant. Therefore, the City has applied for a Pre-Disaster Mitigation grant to retrofit the Large Gym at the Sport Center which is designated as a primary mass care shelter

Plan Maintenance and Updating Process

The City of Milpitas is committed to reviewing and updating this plan annex at least once every five years, as required by the Disaster Mitigation Act of 2000. The City Planning Director will contact ABAG four years after this plan is approved to ensure that ABAG plans to undertake the plan update process. If so, the City again plans to participate in the multi-jurisdictional plan. If ABAG is unwilling or unable to act as the lead agency in the multi-jurisdictional effort, other agencies will be contacted, including the County's Office of Emergency Services. Counties

should then work together to identify another regional forum for developing a multi-jurisdictional plan.

To support this commitment, the City's Office of Emergency Services in the Fire Department will ensure that ***monitoring*** of this Annex occurs on an on-going basis. Triggers for changes to this Annex will include disasters affecting the City, legal changes, notices from ABAG as the lead agency in this process, and other inputs as may occur. Review of the Annex will be an agenda item at a City Executive Staff meeting each spring. At that meeting, the Annex will be ***evaluated*** in light of political and technological changes during the past year or other significant events. The City Executive Staff will be responsible for determining if the Annex should be updated.

Updates to the Annex will be available for ***public review*** at the Office of Emergency Services following publication of a notice of public hearing in a paper of record, as was done for this initial Annex. All public comments will be considered and publicly initiated changes will be integrated into the Annex whenever reasonable and appropriate.